### (19) World Intellectual Property Organization

International Bureau



## E LEBELE BUNDON IL BENNE DIEN BERN BERNE BUN EIN HER BENNE NEUE BEZIE BENNE IEDEN HER BERNE DIEN HOR INCH

#### (43) International Publication Date 3 February 2005 (03.02.2005)

#### PCT

# (10) International Publication Number WO 2005/010588 A1

(51) International Patent Classification7:

G02B 6/42

(21) International Application Number:

PCT/KR2004/001909

(22) International Filing Date: 28 July 2004 (28.07.2004)

(25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data:

10-2003-0052325

29 July 2003 (29.07.2003) KR

(71) Applicant and

(72) Inventor: YOON, Hyun Jae [KR/KR]; 206-802, Kumho Apartment, Bongsun2-Dong, Nam-Gu, Gwangju 503-062 (KR).

(74) Agent: LEE, Jea Ryang; 5F, Gwangju Small & Medium Business Support Center, 621-15, Dochen-Dong, Gwangsan-Gu, Gwangju 506-301 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

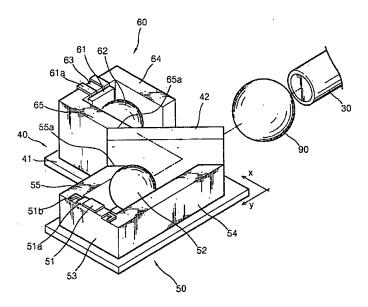
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BI-DIRECTIONAL OPTICAL MODULES PACKAGE



(57) Abstract: Provided is a bi-directional optical module package having an optical module unit comprising a substrate member, an optical filter installed on the substrate member to be inclined with respect to an optical fiber, a first holder supported by the substrate member on one side of the optical filter and having a laser diode and a lens for transmitting an optical signal to the optical filter through one side of the optical filter, and a second holder supported by the substrate member on the other side of the optical filter and having a photodiode and a lens for receiving the optical signal received through the optical filter through the optical filter.

